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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/624,305

07/22/2003

Tom Ruhe

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05/09/2008

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INTELLECTUAL PROPERTY ADMINISTRATION  
FORT COLLINS, CO 80527-2400

EXAMINER

NGUYEN, ALLEN H

ART UNIT

PAPER NUMBER

2625

NOTIFICATION DATE

DELIVERY MODE

05/09/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/624,305	<b>Applicant(s)</b> RUHE ET AL.	
	<b>Examiner</b> ALLEN H. NGUYEN	<b>Art Unit</b> 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 12-17 is/are pending in the application.
- 4a) Of the above claim(s) 1-11 and 18-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Claims 1-11, 18-25 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 02/28/2008.

2. Applicant's election with traverse of the restriction in the reply filed on 02/28/2008 is acknowledged. The traverse is on the ground(s) that there is no serious burden on the examiner for examining all species. This is not found persuasive because:

1) It requires different search query for different invention. For example, claims 11, 18 require the search query of "a span of flexible material" and "a pair of elongated supports supporting the span" which is not required for claim 12. Claim 12 requires the search query of "a media sheet separator downstream from the supporting surface along a media path that extends from the supporting surface to and along the separator, the separator configured to separate a top sheet on the stack from a next-to-top sheet in the stack by resisting the movement of sheets along the media path and wherein the degree of resistance varies along the length of the separator" which is not required for claims 11, 18.

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2) The prior art used for rejecting the elected species can not be used to reject the non-elected species. The examiner requires further search to determine whether there are other prior art directed to the non-elected species.

The requirement is still deemed proper and is therefore made FINAL.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 12-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Rhodes et al. (US 6,257,569).

Regarding claim 12, Rhodes '569 discloses a sheet media input structure for a sheet media processing device (i.e., an apparatus for delivering a sheet media, fig. 4), comprising:

a sheet media supporting surface (i.e., the sheet may tend to stub against the front surface 121 of the separator 14; col. 7, lines 63-65);

a media sheet separator downstream from the supporting surface along a media path that extends from the supporting surface to and along the separator (i.e., the separator is extended so that a rearward portion of the separator comes into contact with one of the pick rollers so as to form a throat between a forward

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portion of the separator and the pick roller; col. 4, lines 16-20, figs. 12, 15), the separator configured to separate a top sheet on the stack from a next-to-top sheet in the stack by resisting the movement of sheets along the media path (i.e., the separator pad 15 is used to prevent more than one sheet of media from advancing through the throat 118 at a time; col. 7, lines 23-25, fig. 13a) and wherein the degree of resistance varies along the length of the separator (i.e., the softer pick roller 12 creates more friction against the top surface of the top sheet 114 than is created between the bottom of the top sheet and separator pad 15; col. 7, lines 28-32).

Regarding claim 13, Rhodes '569 discloses the structure, wherein the resistance varies from a greater resistance at an upstream part of the separator to a lesser resistance at a downstream part of the separator (i.e., more friction against the top surface of the top sheet 114 than is created between the bottom of the top sheet and separator pad 15 so that the top sheet 114 is pulled past the separator pad 15; col. 7, lines 29-32, fig. 13a).

Regarding claim 14, Rhodes '569 discloses the structure, wherein the separator comprises:

a pliable sheet (i.e., the separator pad 15 is preferably made of an elastomer such as rubber; col. 7, lines 24-25);

first and second supports extending along and supporting the sheet (i.e., the frictional forces acting on the media at the separator pad and between the

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pick rollers and pinch rollers; col. 8, lines 14-17, fig. 13b), the supports oriented relative to one another (i.e., the separator is extended so that a rearward portion of the separator comes into contact with one of the pick rollers so as to form a throat between a forward portion of the separator and the pick roller; col. 4, lines 15-20) such that a distance between the supports at the downstream part of the separator is greater than a distance between the supports at the upstream part of the separator (i.e., the rubber surface of the separator pad 15 creates enough friction between itself and the underlying media sheets to overcome the friction created between the top sheet; col. 7, lines 39-42);

a protrusion extending along and protruding from the sheet between the supports (i.e., the use of the media retarder 120, which protrudes above the level of the retracted separator pad, as shown in figs. 14(b) and 15; col. 8, lines 40-45).

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rhodes et al. (US 6,257,569) in view of La Mers (US 4,648,930).

Regarding claim 15, Rhodes '569 discloses the structure, wherein the separator (Separator 14, fig. 15) comprises:

a span of flexible material (i.e., an extendable media separator; col. 3, line 48);

a pair of elongated supports supporting the span (i.e., the frictional forces acting on the media at the separator pad and between the pick rollers and pinch rollers; col. 8, lines 14-17, fig. 13b), the supports oriented relative to one another (i.e., the separator is extended so that a rearward portion of the separator comes into contact with one of the pick rollers so as to form a throat between a forward portion of the separator and the pick roller; col. 4, lines 15-20) such that a distance between the supports at a first part of the span is greater than a distance between the supports at a second part of the span (i.e., the softer pick roller 12 creates more friction against the top surface of the top sheet 114 than is created between the bottom of the top sheet and separator pad 15 so that the top sheet 114 is pulled past the separator pad 15; col. 7, lines 28-31);

an elastomeric pad (i.e., the separator pad 15 is preferably made of an elastomer such as rubber; col. 7, lines 24-25) affixed to or integral with the flexible material (i.e., a media separator that has a front surface 121 made of an elastomer; col. 8, lines 29-30, figs. 13a-13b) between the supports.

It is noted that Rhodes '569 does not explicitly show a generally V shaped configuration.

However, the above-mentioned claimed limitation is well known in the art as evidenced by Mers '930. In particular, Mers '930 teaches a generally V

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shaped configuration (i.e., separator in the form of a plate 22 having a substantially V-shaped edge region or notch 24 which forms a pair of separator edges 26, 28; col. 2, lines 47-50, fig. 1).

In view of the above, having the system of Rhodes and then given the well-established teaching of Mers, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the system of Rhodes as taught by Mers to include: A generally V shaped configuration, since such a modification would ensure a structure suitable for use to vary or alter the resistance along an extendable media separator.

Regarding claim 16, Rhodes '569 discloses the structure, wherein the second part of the span is upstream along the media path from the first part of the span (i.e., the separator is extended so that a rearward portion of the separator comes into contact with one of the pick rollers so as to form a throat between a forward portion of the separator and the pick roller; col. 4, lines 15-20).

Regarding claim 17, Rhodes '569 discloses the structure, wherein the pad is oriented at an obtuse angle relative to the supporting surface (i.e., the separator performance is highly dependent on the size of the throat 118, and the media incidence angle 119, which is the angle between the entering media and the separator pad at the point of tangency to the pick roller; col. 7, lines 44-47, fig. 13c).



***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Schoedinger et al. (US 6,227,534) discloses method and apparatus for controlling an auto compensation pick mechanism to reduce the occurrence of multi-feeds.

Ikeda et al. (US 4,787,764) discloses sheet feeder in printers, having an improved operability in sheet setting.

Yraceburu et al. (US 6,042,103) discloses printing media pick apparatus and method.

Olson et al. (US 5,269,506) discloses paper pick-up system for printers.

Kodama (US 5,226,740) discloses ink ribbon cassette.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALLEN H. NGUYEN whose telephone number is (571)270-1229. The examiner can normally be reached on M-F from 9:00 AM-6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, King Poon can be reached on (571)-272-7440. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/King Y. Poon/  
Supervisory Patent Examiner, Art Unit 2625

/A. H. N./  
Examiner, Art Unit 2625

05/06/2008